Committee on Resources,

Subcommittee on Water & Power

water - - Rep. Ken Calvert, Chairman
U.S. House of Representatives, Washington, D.C. 20515-6204 - - (202) 225-8331

Witness Statement

TESTIMONY OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES
Before the House Committee on Resources Subcommittee on Water & Power
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Presented by Stephen K. Hall, Executive Director

I. Introduction

Chairman Calvert, members of the subcommittee, thank you for the opportunity to speak before you today. My name is Steve Hall, and I am executive director of the Association of California Water Agencies (ACWA) the largest and oldest collection of public water agencies in the country. ACWA's members are responsible for 90% of the water delivered in California - our smallest member serves fewer than 50 people, and our largest serves 17 million urban southern Californians. This testimony, and the attached graphs are intended to illustrate the looming water crisis that faces California, and the need to make investments now to avert that crisis, in California and throughout the west.

II. California's water needs

Today, California's myriad water systems support 35 million people and the world's seventh largest economy. The state's water infrastructure is a network of projects large and small, assembled over decades and with scores of different funding sources. ACWA and its member agencies have played a major role in every one of California's large scale water development efforts, from the installation of public hydropower facilities, to construction of the Central Valley and State Water Projects, to the environmental restoration efforts currently moving forward all across the state.

But while the development of California's water system was undertaken with the best engineering available at the time, no technology can completely overcome the simple reality that 75 percent of our state's water falls in its northern half, while 75 percent of its people live hundreds of miles to the south. In between are scores of unique ecosystems, each with its own water needs amid growing human water requirements.

The vagaries of weather patterns and rapidly changing population trends have a way of

confounding water supplies, and this is one of the guiding truths of California. To overcome this obstacle, planners have employed a variety of means over time to develop and move water to the people who need it. In the 1930s the federal government constructed the Central Valley Project. A network of dams, levees and canals, the federal CVP is the state's largest water project and today delivers roughly 3 million acre-feet of water to farms and cities, and underpins the state's agricultural economy while providing essential flood control.

In the 1960s California embarked to build its own water supply network through the State Water Project. The SWP today moves from 2 to 4 million acre-feet of water throughout the state, keeping food prices stable and affordable and providing drinking water for millions of people in the valley and south state.

But while these systems are impressive, in the years since construction of the CVP and SWP, no equally grand water project has been allowed to move forward. The very few reservoirs built since the SWP were built only after years of public review and inevitable political controversy. Nevertheless, during this same time, California's population has continued to grow, and has nearly tripled since concrete for the SWP was poured. In the last 11 years, only two regional reservoirs have been built in California, even though eight million people have come to the state during that time. Meanwhile, new awareness of environmental water needs and commitments to protect salmon have further taken developed supplies away from water users and re-allocated it to the environment. Over the last decade, several million acre-feet of water have been shifted each year to meet new environmental mandates. This rededication of resources, coupled with rapid population growth, has vastly destabilized California's water picture.

As a result, California's water system - constrained by its finite supplies - exists in a continual state of conflict between multiple uses and competing priorities. Beneath the larger disputes over finite water supplies and how to use them, lie even more conflicts over the quality of delivered water, its source, even its temperature in the streambeds. Under this fractured scenario, California has for years abandoned water issues to the political realm, missing out on key opportunities to work together to stabilize its water supply picture and plan for the future.

To compensate for these conflicts, water managers have gone to great lengths to stretch existing water supplies. California leads the nation in water recycling and reclamation efforts. Groundwater recharge and desalination projects are in place in a number of communities across the state. Drip irrigation and farm conservation systems are growing 50 percent more food and fiber than was grown 20 years ago on the same amount of water. And local water managers have implemented water conservation efforts that are so successful that southern California's large urban centers today import the same amount of water they did in 1975. A decade ago

California water agencies voluntarily began a massive water conservation program. Today more than 150 California water agencies are spending millions of dollars each year on conservation. The result is that today California saves about a half million acre-feet of water a year through conservation.

Only through such aggressive, pioneering measures have California's *existing* water needs been met. But most of California's water system was built decades ago, before modern construction techniques were available. Conservation and reclamation efforts can do a lot, but they cannot single handedly meet California's modern water needs. As a result, not much more can be sqeezed from a system that is outdated and grossly inadequate. The outdated, undersized system in place today can barely meet the needs of California's agricultural, urban, environmental and business sectors during wet years as recent events have shown, and would be unable to meet even basic needs in a sustained drought.

In spite of the many systems in place to equitably distribute water supplies, new mandates proliferate, requiring environmental diversions of water, and resulting in multiplied conflicts. While well intentioned, the implementation of the Endangered Species Act, Clean Water Act and Central Valley Improvement Act are now demanding 21st century performance from a system that essentially pre-dates the Cold War. In 1999, after a fifth straight wet year, this fact became clear when regulatory agencies unilaterally shut down water pumping plants to protect migrating schools of Delta smelt. This action nearly brought Silicon valley industries to a halt, and threatened to cut off key supplies to valley farms at the peak of the irrigating season. While it is true that society as a whole has come to put a greater premium on protecting natural resources, the pressures of increasing population have made it more difficult to do so.

Many of the environmental statutes today governing water management ignore this basic tension, simply trying to force a change back to a world without man's footprint. The limitations of this approach are increasingly being seen in the strains on California's water system. If we are going to satisfy both our desire to protect fish and waterfowl, while retaining a viable "habitat" for 35 million human beings, we are going to have to invest in new management structures based on state-of-the-art science and technology. These include new irrigation equipment, more efficient residential use, and more recycling of water. But even if we do all these things, we also need more storage of water -- so that there will be enough in the drier years for both people and fish.

Droughts and flood meanwhile play havoc with the state's water reliability, placing the state's population and economy in an increasingly fragile position beneath a looming water crisis. California needs ways to balance competing needs while accounting for its varied weather, and this is only possible through investment in its antiquated water infrastructure.

III. Interdependence with other states

Like much of the American west, California's water system operates in a state of close interdependence with that of other states, even Mexico. The Klamath river flows across the Oregon border. Lake Tahoe sits astride our eastern neighbor, Nevada. Watersheds and rivers do not comply with local or interstate boundaries, and as such, necessitate watershed planning across agency lines and state borders.

Perhaps the best example of California's interdependence with her neighbors is played out on the Colorado River. In 1922, representatives of seven states, including California, negotiated the Colorado River Compact - a road map for dividing the Colorado's waters for flood control and economic uses in each of the states. The compact was meant to remove causes of present and future controversies surrounding apportionment of the river's waters. But those who signed the compact 79 years ago could not have predicted the enormous urban growth in the desert Southwest, the emphasis Americans would place on protecting the environment in later decades, or the technological advances that have since come about.

For years, California has taken up to 1.3 million acre-feet more than its contractual share of 4.4 million acre-feet from the Colorado, enabling billions of dollars in annual productivity from southern California industry and agriculture. But now, neighboring states need that water and a new agreement has had to be reached. Accordingly, California is reducing its use of the Colorado so that its neighbors can also grow. This interdependence, and the successful adoption of a compromise, will foster balanced growth in the American west. More importantly, the solution will be graduated in over time, preventing disruption to the relevant communities and protecting the ecosystems that have grown up around an altered, though living river.

On Lake Tahoe, joint partnerships between Nevada and California have enabled the preservation of a national environmental and recreational treasure. Interstate legislative successes like the one forged last year between the Congressional delegations of California and Nevada provides the blueprint of collaboration necessary to promote regional water stewardship. This spirit should infuse efforts to resolve the water challenges that lie ahead.

In each of these examples, neighboring states have forged compromises that enable California to produce. In return, the United States has in California an engine of economic growth that propels its varied economies, develops new technology and feeds millions of people beyond its own borders. Just as electricity is transmitted across state lines to cities in California, so has the water it shares with its neighbors brought benefits to many on both sides of the state line.

But by the same token, unless we lead the way to increased California water capacity, the

rolling blackouts currently buffeting western power supplies could very likely blackout local water supplies, with far more severe results.

IV. Benefits of an improved California water picture

Environmental mandates adopted during the past generation aim to stabilize declines in fish runs and wetlands, and redress environmental damage that has been caused by an infrastructure system constructed before the age of environmental protection. At the same time, these efforts have exchanged environmental progress for economic uncertainty, to the point where today, real businesses are facing skyrocketing costs, and making real decisions to leave the state.

If California's water supply picture can be stabilized, considerable additional progress can be made on behalf of the environment. A secure, modern water infrastructure that captures more of the excess water during floods for use during dry periods could drastically reduce pressure on existing river systems. As things stand today, vast quantities of fresh water run out to the Pacific Ocean during floods because, even if the authority to do so were granted, we physically don't have enough room to store the water. Floods in themselves are harmful, but if their excess flows could be stored, significant amounts of water could be left in rivers during later years to benefit fish and wildlife.

The wetlands that are home to millions of migratory birds offer another graphic example of how improvements in California carry over into neighboring states. The health of the flyways and ecosystems in Oregon, Washington and Alaska that support migrating waterfowl are acutely impacted by the condition of wetlands in our state. With balanced management and a stabilized water system in California, many wetlands that might otherwise serve as a needed water source can be preserved and improved.

A stabilized California water picture will also mitigate for the state's chief crisis today - a shortage of power. Water pumping - pushing it over mountain ranges, and pulling it from out of the ground - is the greatest single use of electricity in the state. Refining and diluting finite water supplies to meet current Safe Drinking Water Act standards further consumes the state's chronically short supplies. If more water were available, distributed across the state in surface and underground reservoirs to meet these needs, more power would be generated, and far less power would be needed to quench the thirst of California's water users.

But perhaps the best example of the benefits of an improved California water picture is the benefit promised to the regional economies. Central valley agriculture allows school lunch programs and fresh produce to remain affordable. Silicon valley industry develops semiconductors and powers space exploration. Statewide manufacturing, filmmaking, tourism, recreation, construction, housing, fishing, transportation and education pump billions of dollars

into the region that spills over and multiplies across the western states. If this is to continue and future generations are to enjoy, at a minimum, the prosperity experienced by our own, we must safeguard and improve California's water picture.

V. The key to improving California's water picture

California is mired in a power crisis today for several independent reasons, but chief among these is its failure to recognize mounting demand for a finite power supply. This simple discrepancy cannot be allowed to repeat itself in water, for the stakes are far greater and the remedies far more complex.

Today, the average amount of time necessary to complete a water storage reservoir is 15 years, from planning to design to construction. Unfortunately, the demand for water does not wait that long. California has been able to get by with its existing demands only through the innovative water measures mentioned above. But the effectiveness of those measures has reached their limit. As has happened in the energy market, unless we invest in expanding the capacity of our water infrastructure, California will fall victim to another totally foreseeable crisis, for no other reason than its refusal to prepare.

In our view, the best way to avoid this crisis is to begin preparing through targeted investments in California's water infrastructure. These investments will have demonstrated environmental and economic benefits, not only in California, but throughout the West. California can provide enough water for a healthier economy and a healthier environment; for safe drinking water while continuing to irrigate; for healthy ecosystems and water to run our high tech businesses; for a healthy interstate flyway and for commercial fishing; for a high quality of life for Californians and a high quality habitat for our wildlife.

But California can only provide these things through a partnership among federal, state and local governments. That partnership must involve the intellectual capital and the funding necessary to meet all of these needs. The interest, indeed the need within California to make these investments is clear. That is why Californians overwhelmingly passed a $1 billion water bond in 1996, and another $2 billion water bond in March, 2000.

But it is also clear that there is a strong federal interest in making these investments. First, there is a strong federal interest because the federal government owns and operates the Central Valley Project, the single largest water project in the state of California. The continued viability of that project depends on making these investments. Second, there is a strong federal interest in protecting and enhancing environmental treasures, such as the San Francisco Bay-Delta Estuary. Congress has demonstrated a commitment to such environmental protection through investments in Chesapeake Bay, the Great Lakes and, most recently, the Florida Everglades. The need for a

similar investment in this estuary is no less compelling. Third, the important federal policy of improving the safety of drinking water for all Americans is causing California water systems to make substantial investments in water quality. At the same time, they are also being asked to support environmental improvements.

Finally, many of the laws that have reallocated much of California's water resources are federal laws like the federal Endangered Species Act and the Central Valley Project Improvement Act. These laws, while providing broad societal benefits through environmental protection, have had the effect of destabilizing our water supply system and exacerbating the conflict among competing needs for water within the state. It is an unfortunate fact that the broad societal benefits from the preservation of species is accomplished at a cost borne by a relatively small number of citizens. We do not believe this mistake should continue.

There are those who call for any investments in water infrastructure to be paid for exclusively by water users, on the basis that only those who directly use the water developed see benefit from it; and with the further argument that any environmental water that has been reallocated has been simply given back to the environment from which it was taken. We categorically reject the notion that there is no broad societal benefit to water infrastructure investments that enhance our environment as well as our ability to deliver safe, reliable, affordable water. There is clearly an interest in producing these economic, public safety and environmental benefits, both at the state and federal levels.

We therefore believe any plan to finance the investments that are needed should be shared among water users, the state government and the federal government. The share borne by water users should be commensurate with the benefits that they receive, and structured in a way that accounts for the fact that any future water development will come at a substantially higher cost than water developed earlier, a portion of which has been reallocated. This point is important because when those earlier water projects were developed, it was on the basis of contracts that were entered into in good faith by local interests. To the extent conditions have changed by virtue of a changing of societal values, the cost of those changes should be borne broadly, not exclusively by those who are under current contracts.

We will support a financing plan that takes all of these factors into account and which fairly apportions the costs accordingly.

The chairman of this subcommittee, Congressman Calvert, has announced his intention to develop legislation to authorize implementation of a comprehensive plan to develop additional water supplies and restore environmental values within California. This comprehensive plan has come to be known as CALFED, based on the partnership between the state of California and the

federal government, which led the effort to develop this plan. ACWA and its members have been actively involved in the development of this plan, and we support its implementation, provided it can be implemented in a way that balances competing needs. We wholeheartedly pledge our support for Congressman Calvert and a commitment to work cooperatively with him as well as other members of Congress and stakeholders within California to develop this legislation.

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